

**Electronic Solutions, Inc.**



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Received & inspected

SEP 21 2010

FCC Mail Room

9/15/2010

Ervin Fields, Co-Owner  
Electronic Solutions, Inc.  
201 N Main St.  
Roxboro, NC 27573

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: TV White Spaces  
ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

My company, Electronic Solutions, Inc, provides fixed wireless broadband service in Person County, NC. We rely primarily on unlicensed spectrum to deliver broadband services to consumers that have few, if any other broadband choices. We built our network from scratch using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz and 5 GHz spectrum for unlicensed broadband devices. Thanks to the Commission's initiatives, some of the consumers in the remote areas of Person County can now get wireless broadband service.

We are very interested in using the television white spaces so that we can expand our wireless broadband network to the underserved areas of the county. Due to our service area's rolling terrain and relative lack of tower sites, it is not cost effective to provide wireless broadband with the existing unlicensed spectrum. We are committed to deployment as soon as equipment for point-to-multipoint service is commercially available.

I am pleased that the FCC will be acting on TV white space petitions for reconsideration in the near future. There are several proposals that would help us to deploy service:

First, the FCC should allow WISPs to operate using base station antennas mounted higher than 30 meters, and we should be allowed to install customer antennas (CPE) at heights below 10 meters. If we could increase our base station antenna height to 100 meters, we could cover three times more area with a base station and reduce our equipment, tower acquisition and tower lease fees by a large amount – an amount that could be the difference between deploying and not deploying in an area. We support the WISPA and Motorola proposals to increase base station height. By removing any minimum CPE height restrictions, we would not have to put tall masts on residences and we would be able to provide service at a lower cost.

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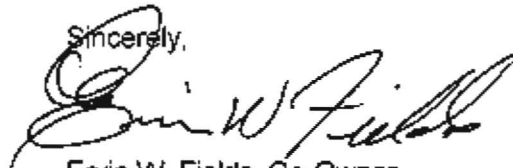
September 16, 2010

Second, we believe we should be allowed to operate with power in excess of 4 Watts EIRP in rural areas. As is the case with tower height, operating with higher power will give us a greater coverage area and we will not need to spend as much money on infrastructure.

Third, we are very concerned about a proposal made by FiberTower and others to license white space spectrum for point-to-point wireless backhaul. Not only would adopting this proposal take six channels (36 MHz) and perhaps more channels away from us, but WISPs also would have to protect these licensed links. Moreover, channels and areas far beyond the links would be blocked because the signals from the licensed links would overshoot the path and the endpoints. This is due to the low-cost, low-gain antennas FiberTower wants to use. We also would not deploy if a licensed point-to-point user could come along later and put us out of business with a licensed link. We support the views expressed by WISPA in their September 8 letter and ask the FCC to reject the FiberTower proposal.

We are very excited by the opportunities that would be made possible by use of the television white spaces. Our proposals would reduce the number tower sites required, increase quality of service and reduced cost of deployment. This would allow for cost effective expansion into underserved and remote areas where no other broadband service is available.

Sincerely,

A handwritten signature in black ink, appearing to read "Ervin W. Fields". The signature is fluid and cursive, with the first name "Ervin" being more prominent.

Ervin W. Fields, Co-Owner  
Electronic Solutions, Inc.